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Modification of Mass Transport during Sintering Induced by Thermal Gradient
FUNDAMENTAL ASPECTS OF SINTERING; Effects of Crystallization and Vitrification on Sintering Properties of Bentonite Clay; Dissolution of Alumina in Silicate Glasses and the Glass Formation Boundary; The Effect of Volume Fraction on Grain Growth during Liquid Phase Sintering of Tungsten Heavy Alloys; IN-SITU MEASUREMENTS IN SINTERING; In-Situ Investigation of the Cooperative Material Transport during the Early Stage of Sintering by Synchrotron X-Ray Computed Tomography; Geopolymers Sintering by Optical Dilatometry
MODELING OF SINTERING AT MULTIPLE SCALES
Meso-Scale Monte Carlo Sintering Simulation with Anisotropic Grain Growth; Numerical Simulation of Densification and Shape Distortion of Porous Bodies in a Granular-Transmitting Medium; The Effect of a Substrate on the Microstructure of Particulate Films; Modelling Constrained Sintering and Cracking; Atomistic Scale Study on Effect of Crystalline Misalignment on Densification during Sintering Nano Scale Tungsten Powder; Variations in Sintering Stress and Viscosity with Mixing Ratio of Metal/Ceramic Powders
NOVEL SINTERING PROCESSES: FIELD-ASSISTED SINTERING TECHNIQUES
Finite Element Modelling of Microwave Sintering; Direct and Hybrid Microwave Sintering of Ytria-Doped Zirconia in a Single-Mode Cavity; The Influence of Minor Additives on Densification and Microstructure of Submicrometer Alumina Ceramics Prepared by SPS and HIP; The Electro-Discharge Compaction of Powder Tungsten Carbide-Cobalt-Diamond Composite Material; Microwave Sintering Explored by X-Ray Microtomography; Pulse Plasma Sintering and Applications; Influence of Electric Fields during the Field Assisted Sintering Technique (FAST)
Sintering of Combustion Synthesized TiB₂-ZrO₂ Composite Powders in Conventional and Microwave Furnaces
Production and Characterization of WC-Co Cemented Carbides by Field Assisted Sintering; Microwave Rapid Debinding and Sintering of MIM/CIM Parts; SINTERING OF BIOMATERIALS; Analysis of Sintering of Titanium Porous Material Processed by the Space Holder Method; Effect of Sintering Temperature and Time on Microstructure and Properties of Zirconia Toughened Alumina (ZTA); Sintering Zirconia for Dental CAD/CAM Technology; SINTERING OF MULTI-MATERIAL AND MULTI-LAYERED SYSTEMS
Co-Sintering Behaviors of Oxide Based Bi-Materials

Sommario/riassunto

This volume is part of the Ceramic Engineering and Science Proceeding (CESP) series. This series contains a collection of papers dealing with issues in both traditional ceramics (i.e., glass, whitewares, refractories, and porcelain enamel) and advanced ceramics. Topics covered in the area of advanced ceramic include bioceramics, nanomaterials, composites, solid oxide fuel cells, mechanical properties and structural design, advanced ceramic coatings, ceramic armor, porous ceramics, and more.
